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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/782,677

Filing Date: February 12, 2001

Appellant(s): Pace ET AL.

Robert A. Hulse
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 10, 2006 appealing from the Office action mailed February 15, 2006.

(1) Real Part of Interest

A statement identifying by name the real part of interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after non-final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 6,070,142 McDonough

US 6,257,981 Acres

US 6,003,013 Boushy

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims: The ground(s) for rejection are reproduced below (including the paragraph reference numbers – beginning with '5') from the Non-final Office Action, mailed February 15, 2006, and are provided here for the convenience of both the Appellant and the Board of Patent Appeals:

5. **Claims 1, 2, 7-10, 12-14, 17-21, 23, 24, 29-32, 34-36, 39-43, 45-47, 52-61, 66, 68-71 and 75** are rejected under 35 U.S.C. 102(e) as being anticipated by McDonough US Patent 6,070,142.

Regarding **Claim 1**, McDonough discloses:

a system for providing service to customers at service locations, each service location having a communication device adapted to communicate one or more events pertaining to a service event for a customer at the service location
(Figure 3 #350, #354, #358, #356, #352, are all customer service locations which can

communicate one or more events pertaining to a service event), the system comprising:

a decisioning system communicatively coupled to the communication devices (Figure 3 #360 routing engine) **to receive the events** (column 9 line 37-38, service provider uses decision logic to determine customer needs),

the decisioning system scheduling a primary service attendant from a plurality of service attendants for servicing each event (column 12 line 4-5, system assigns resource based on requirements and characteristics; column 8 line 25-26, VRU assigns call to employee. McDonough discloses a call center where there are a plurality of service attendants –see column 8 line 48-50, employee workstation & column 8 line 7 resource profiles identified of employees to handle calls, column 9 line 1, employees in call center). As per Webster's II as discussed above, the various servers in column 8 line 49-53 also comprise a plurality of service attendants.

according to at least a value of the customer at the service location that generated the event (column 12 line 36-38, system allocates resource levels to deliver desired customer experience);

a communication system communicatively coupled to the decisioning system to transmit a message to the primary service attendant selected for an event, the message indicating the service location at which the event is to be serviced (column 8 line 53-56 context manager routes contacts between many different resources, these resources constitute different attendants), the message indicating the service location at which the event is to be serviced (column 8 line 49-52, service locations, include a workstation);

where the indicated service location is in a business establishment, and column 8 line 27, the indicated service location (i.e.) the workstation is in a call center, which is a business establishment.

a plurality of message receivers, used by the service attendants, the primary service attendant using a message receiver, to receive the message from the communication system (Figure 3 #340, phone and #342, workstation both receive messages from communication system. Column 8 line 49-50, there are a number of employee workstations (i.e message receivers) that are used by service attendants, including the primary attendant tasked with receiving a call (i.e. message) from the context manager –see column 8 line 38-40 and Figure 3).

Regarding **Claim 2**, McDonough discloses wherein the customer value is based on potential revenue generated by the customer (column 12 line 33-34, customers valued based on profitability)

Regarding **Claim 7**, McDonough discloses wherein the decisioning system uses a plurality of rules for scheduling the events for service (column 12 line 30-32, rule-based routing allows customer preferences to be met).

Regarding **Claim 8**, McDonough discloses wherein the rules include: at least one rule for scheduling events according to an age of the event (column 4 line 9, context manager provides management over life of event).

Regarding **Claim 9**, McDonough discloses wherein the rules include: at least one rule for scheduling events according to a type of event (column 4 line 55-56, rules based on customer activity).

Regarding **Claim 10**, McDonough discloses wherein the rules include: at least one rule for scheduling events according to a location of the service location (column 8 line 34-36, service locations originating events).

Regarding **Claim 12**, McDonough discloses wherein the rules include: at least one rule for selecting a service attendant for servicing an event based on a location of the service location (column 8 line 34-36, service locations originating events) which generated the event and an assigned location of the service attendant (column 11 line 64-67, rules determine what resource will handle event).

Regarding **Claim 13**, McDonough discloses wherein the rules include: at least one rule for messaging a supervisor of the primary service attendant if the primary service attendant has not completed servicing the event in a certain amount of time (column 9 line 1-2, availability of employees and overflow management).

Regarding **Claim 14**, McDonough discloses wherein the rules include: at least one rule for scheduling events according to an age of the event (column 4 line 9,

context manager provides management over life of event); at least one rule for scheduling events according to a type of event (column 4 line 55-56, rules based on customer activity); at least one rule for scheduling events according to a location of the service location (column 8 line 34-36, service locations originating events); and at least one rule for selecting a service attendant for servicing an event based on a location of the service location (column 8 line 34-36, service locations originating events) which generated the event and an assigned location of the service attendant (column 11 line 64-67, rules determine what resource will handle event).

Regarding **Claim 17**, McDonough discloses
wherein the communication system is a two-way messaging system
whereby the message receivers can transmit and receive messages.

Figure 3 #370 CTI, #340 employee telephone, #342 employee workstation; these devices are two way messaging systems that can transmit and receive messages, #340 and #342 are two-way message receivers that can transmit and receive messages.

Regarding **Claim 18**, McDonough discloses wherein: the primary service attendant can accept or decline to service an event using the two-way message receiver (Figure 3 #342, employee workstation where employee can decline routing of service request from #370 CTI) and Wherein: in response to the primary service attendant declining to service an event (column 8 line 9, server provides status of resource availability, including service attendant declining service), the decisioning

system selects a secondary service attendant for servicing the event (column 12 line 7-8 overflow can be assigned to resource with the required skills), and the messaging system transmits a message to the secondary service attendant to service the event (column 8 line 20-21, call routed to another resource based on routing rules).

Regarding **Claim 19**, McDonough teaches wherein: the primary service attendant can accept or decline to service an event using the two-way message receiver (Figure 3 #342, employee workstation where employee can decline routing of service request from #370 CTI), and wherein: in response to the primary service attendant accepting to service an event, the decisioning system establishes the primary service attendant as being unavailable to service another event until the primary service provider completes service of the accepted event (column 8 line 13-15, if server indicates resource is not available to service event, then overflow management occurs).

Regarding **Claim 20**, McDonough discloses wherein the decisioning system monitors the time taken to service each event (Figure 8 #826 performance feedback), and responsive to time taken to service an event exceeding a threshold amount (column 7 line 57, if customer hangs up with waiting on hold) , the decisioning system selects an employee to notify of the incomplete service (column 7 line 55-56, CTI system captures information; Figure 3 #342, message transmitted back to workstation), and instructs the messaging system to transmit a message to the selected employee (column 7 line 56, information captured about abandoned calls is transmitted to employee; column 7 line

59-60, employees can call customers back and offer to be of service).

Regarding **Claim 21**, McDonough discloses. a customer database (Figure 7, DBMS, #706 customer, column 4 line 4 customer information database), communicatively coupled to the decisioning system (Figure 7 #702 Context Manager) and containing customer records indicating for each customer a measure of the customer's value and the customer's identification number (Figure 7 #706 customer record), the decisioning system receiving from a service location a customer identification number and querying the customer database with the received customer identification number to obtain the measure of the customer's value (column 7 line 25, customer is profile identified by VRU; column 12 line 14-16, service levels provided are based on customers relationship), the decisioning system scheduling the event for service according to the obtained customer value (column 12 line 36-38, customer segmentation to allocate resources to deliver desired customer experience, based on profitability of customers).

Claims 23, 24, 29-32, 34-36, 39-43, 45-47, 52, 53, 55-61, 66, 68-71 and 75 recite limitations already addressed by the rejection of **Claims 1, 2, 7-10, 12-14 and 17-21** above, therefore the same rejection applies.

Regarding **Claim 54**, McDonough discloses wherein the message from the first service attendant is transmitted from a communication device fixed at the service

location (Figure 3 #354 web server is fixed).

6. **Claims 3-6, 11, 22, 25-28, 33, 44, 48-51, 62-65, 67, 72 and 73** are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonough US Patent 6,070,142 in view of Acres US Patent 6,257,981.

Regarding **Claims 3-6**, McDonough teaches segmenting customer value based on profitability, that is, more profitable customers are valued more highly than less profitable customers (column 12 line 38-41). McDonough does not teach valuing customers specifically based on theoretical win profile, a room rate of a room occupied by a customer, a room type of a room occupied by the customer, a number of persons in a party associated with a customer. Acres teaches basing customer value on the customer's theoretical win profile (column 29 line 21, theoretical wins calculated exactly per customer), as per **Claim 3**, and a number of persons in a party associated with the customer (column 20 line 36-38, buses and groups can be measured as to their profitability due to individual player tracking of each group), as per **Claim 6**. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of McDonough to include valuing a customer based on theoretical win profile and number of persons in a party associated with the customer, as taught by Acres, because it would improve casino profitability by enabling casinos to better identify and exploit the drivers of their profitability. The examiner takes official notice that it is common for casinos to incorporate hotels into their gaming complex. It would then be obvious for casinos to base customer value on a customer's room rate, as per **Claim 4**,

and room type, as per **Claim 5**, because a customer would be more profitable to the casino if they were guests in a more expensive room or in a more expensive type of room. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the collective teachings of McDonough and Acres, as taught above, with valuing customers based on their room rate, as per **Claim 4**, and room type, as per **Claim 5**, because it would better help the casinos target customers for bonuses who were (column 3 line 26) valued and thereby improve casino profitability by encouraging those customers for more gaming play (column 7 line 3-4, promotional campaigns target individual customers based on their gaming transactions).

Regarding **Claim 11**, McDonough teaches segmenting service based on customer value (column 12 line 36-38) and providing service to customers that is fast (column 13 line 51, fast and easy manner). McDonough does not teach wherein the rules include: at least one rule for scheduling events according to a combination of an age of the event and a value of the customer. Acres teaches wherein the rules include: at least one rule for scheduling events according to a combination of an age of the event (column 26 line 5-7, minimum activity level by player in order to be awarded a bonus jackpot; column 28 line 61-63, time and duration of play to used in determining bonusing) and a value of the customer (column 28 line 67, bonusing provided to certain individual players based on their playing profile). Acres teaches its player tracking system allows the casino to modify and tailor their gaming to match players tastes and demands (column 29 line 18-19). Acres teaches its player tracking system helps

improve profitability (column 3 line 43, measuring profitability; column 7 line 3-4, allows promotions to be run which encourage more gaming play by customers). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of McDonough to include scheduling an event according to the age of an event and value of the customer, as taught by Acres, because it would improve casino profitability by better scheduling events in the form of promotions or bonuses to valued customers in order to increase their play time.

Regarding **Claim 22**, McDonough teaches a database containing customer identification information including addresses and unique account numbers. McDonough does not teach wherein each service location includes a customer identification card reader, for reading a customer identification number from a customer identification card. Acres teaches wherein each service location includes a customer identification card reader (column 12 line 1, section titled “card reader”; Figure 2 #100, card reader), for reading a customer identification number from a customer identification card (column 13, line 65-66, unique player identification number). Acres teaches that having a card reader improves the casino’s ability to track customer play and tailor promotions and targeted mailing campaigns for the customer (column 20 line 26-39, player tracking helps casino use special database to target high value customers for future trips). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of McDonough to include reading a customer ID number from each service location using a card reader, as taught by Acres, because it

would help the casino better track individual player activity to develop targeted mailing campaigns and improve casino profitability.

Claims 25-28, 33, 44, 48-51, 62-65, 67, 72 and 73 recite limitations already addressed by the rejection of **Claims 3-6, 11, 22**, therefore the same rejection applies.

7. **Claims 15, 16, 37, 38 and 74** are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonough US Patent 6,070,142 in view of Boushy US Patent 6,003,013.

Regarding **Claim 15**, McDonough teaches:

a system for valuing customers based on their profitability to a business (column 12 line 36-39).

McDonough does not teach:

wherein the service locations are gaming machines, and the communication devices are interface boards coupled to the gaming machines, which communicate game events to a gaming machine management system.

Boushy teaches:

wherein the service locations are gaming machines (column 6 line 33-34, invention applies to all gaming machines & tables; Figure 14 #130 slot machine), **and**

the communication devices are interface boards coupled to the gaming machines (column 5 line 50-51, all gaming activity routed to computer; Figure 14 #708 Game Monitoring Unit), which communicate game events to a gaming machine management system (Figure 14 #262, connected to slot monitoring system).

Boushy teaches his system provides an integrated way to recognize customer value in terms of the customer's worth to the casino.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the customer valuation system which deploys service resources to handle highest value customers first, as taught by McDonough, to include service locations that are gaming machines where interface boards at those gaming machines communicate game events to a gaming machine management system, as taught by Boushy, for the purpose of increasing profitability by targeting service to those customers providing the highest profitability to the casino.

Regarding **Claim 16**, McDonough teaches a system for valuing customers based on their profitability to a business (column 12 line 36-39).

McDonough does not teach:
wherein the gaming machines are slot machines, and the interface boards communicate slot events to the slot management system.

Boushy teaches

wherein the gaming machines are slot machines

(Figure 14 #130 slot machine)

and the communication devices are interface boards that communicate slot events to the gaming machine management system

Figure 14 #708 Game Monitoring Unit (i.e. interface board) communicates slot events to the SMS (Slot Monitoring System); Figure 14 #262, connected to slot monitoring system (i.e. gaming machine management system).

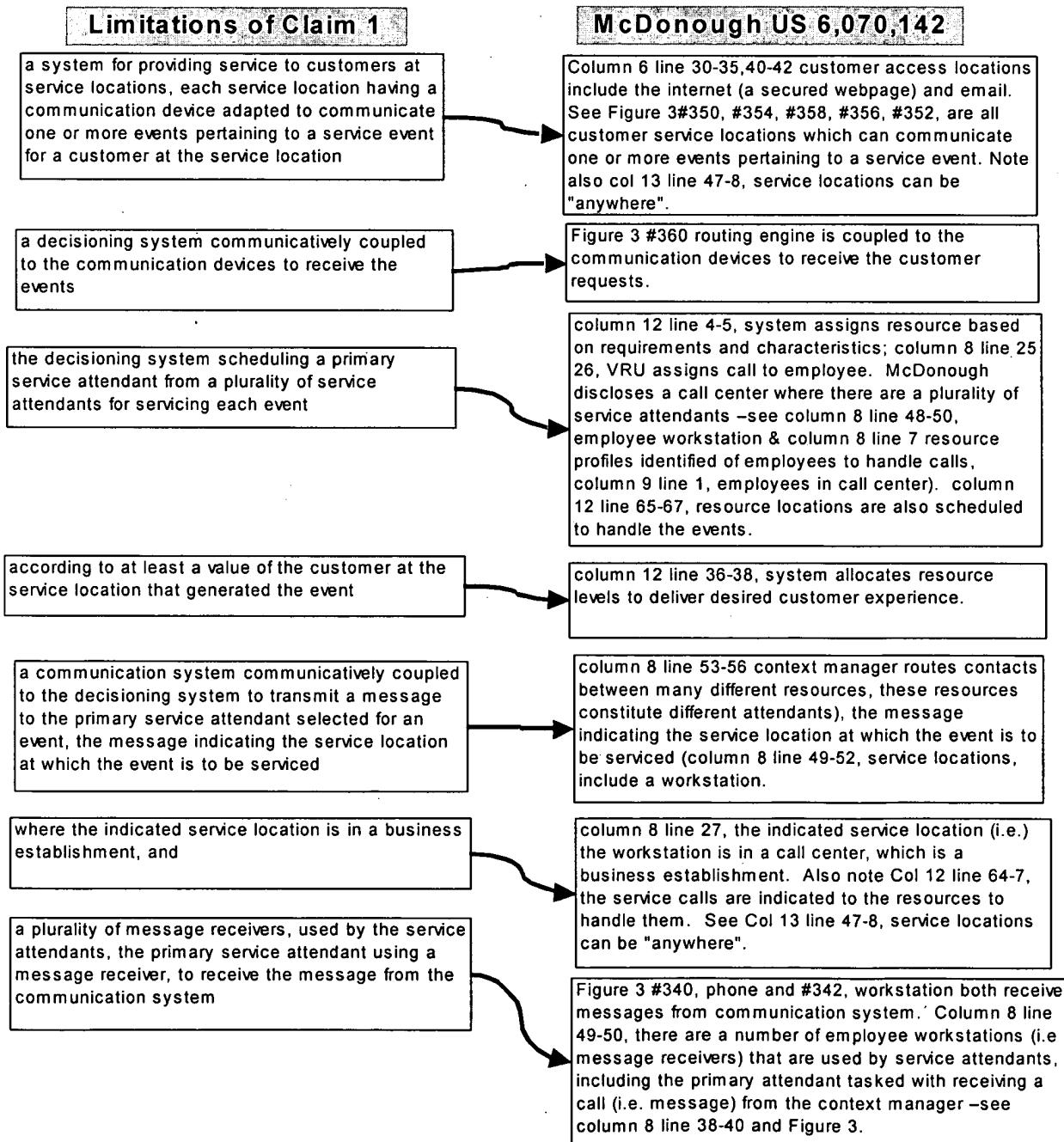
Boushy teaches his system provides an integrated way to recognize customer value in terms of the customer's worth to the casino.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the customer valuation system which deploys service resources to handle highest value customers first, as taught by McDonough, to include service locations that are slot machines where interface boards at those slot machines communicate game events to a slot machine management system, as taught by Boushy, for the purpose of increasing profitability by targeting service to those customers providing the highest profitability to the casino.

Claims 37, 38 and 74 recite limitations already addressed by the rejection of **Claims 15 and 16**, therefore the same rejection applies.

(10) Response to Argument

In response to the applicant's arguments, the examiner respectfully refers to the claim mapping diagram below.



The applicant argues (Item I & II) that McDonough does not disclose providing service to customers located at service locations in a business establishment. The applicant further argues that the claimed invention requires dispatching of service attendants and that the customers be at physical locations in the business establishment.

The examiner respectfully disagrees.

The specification does not contain a definitive definition of the term "business establishment". Furthermore, there is a non-limiting discussion in the specification as to what a 'business establishment' is.

The examiner refers to a ¹dictionary, specifically Merriam Webster's Collegiate Dictionary, 10th Edition, which defines an "establishment" as "**a place of business**". A business establishment is therefore, according to its ordinary and accustomed meaning, "a place of business for business".

The claim limitation states "**where the indicated service location is in a business establishment**". The examiner notes that the claim limitation does not state

¹ As to the use of a dictionary to providing definitions, the examiner notes: "It is well settled that dictionaries provide evidence of a claim term's ordinary meaning. Such dictionaries include dictionaries of the English language, which in most cases will provide the proper definition and usages, and technical dictionaries, encyclopedias and treatises, which may be used for established specialized meanings in particular fields of art." *Inverness Medical v. Biomeditech Co.* 309 F.3d at 1369, 64 USPQ2d at 1930. See also *Inverness Medical v. Warner Lambert Co.* 309 F. 3d at 1378, 64 USPQ2d at 1936 ("We begin claim construction analysis with the ordinary meaning of the disputed claim term. It is well settled that dictionary definitions provide evidence of a claim term's ordinary meaning. Potentially relevant dictionaries include dictionaries of the English language (providing general definitions and usages) and technical dictionaries, encyclopedias, and treatises (providing specialized meanings used in particular fields of art.)") (citations and quotations omitted); and *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308

that the service location is in a business establishment, but rather that the *indicated* service location is in a business establishment. The examiner considers McDonough to disclose this limitation because as customers interact with the virtual call center, service locations for servicing customers are indicated or pointed out to the service staff (note that McDonough teaches that resources can be other than people who are providing service – see column 12 line 64-67).

Again, the applicant does not provide a definition in the specification as to what “indicated” means so the Examiner turns to Webster which defines it as: “to point out”. So the “indicated service location” is a service location that is being pointed out. When customer contacts come into McDonough’s virtual call center, the service locations are indicated, that is, the system indicates or points out to the resources that customer contacts have come in that require service (i.e. an “indicated service location” that is in the business establishment, the call center). Furthermore, McDonough teaches that customers can be provided service anywhere, so whether one considers the ‘indicated service location’ to be the indication in the service center that a customer request has come in or whether the ‘indicated service location’ to be the customer’s location – McDonough addressed both of these limitations (see column 13 line 47-50).

Thus McDonough discloses where the “indicated service location is in a business establishment”, since a call center is a business establishment where the service requests come in that are noted as “indicated service locations” to the resources that

are going to serve them.

(The examiner would further point out that McDonough teaches that his virtual customer service center provides “anywhere, anytime, service and interacts with a customer as a market of one” (column 13 line 46-47), i.e. “anywhere” including providing service to a customer in a business establishment.)

The examiner notes that the term “dispatch” as further argued by the applicant, is not in the claim language

The applicant argues (Item III) that the combination of McDonough and Boushy would destroy a fundamental principle of the operation of McDonough. This argument is based on the assertion that that claimed invention requires dispatching, i.e. since McDonough does not teach dispatching, it cannot in combination with Boushy render the claimed invention obvious.

The examiner respectfully disagrees.

In response to applicant's argument that McDonough and Boushy cannot be combined, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have

definition of the term.”)

suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Also, nowhere in the claims is the limitation "dispatch" or "dispatching" recited. As discussed above, McDonough meets the claimed limitations of the independent claim. The additional limitations presented in Claims 15, 16, 37, 38 and 74 recite service locations that are gaming machines; communication devices that are interface cards. However there are no limitations recited that require dispatching of service attendants to the gaming location. For example, in a casino there are control rooms used for monitoring customers and for security purposes. If a light flashed indicating that a gaming machine required service and the service attendant in the control room pushed a button remotely to service the machine, then the limitations of the claims would be met, because the claims do not recite that the attendants are dispatched to the service location.

Similarly, McDonough teaches a virtual call and service center that provides service to customers, as they are a customer of one, wherever they are (see column 13 line 47-50). Boushy teaches the additional limitations regarding the casino/gaming – specific limitations cited in Claims 15, 16, 37, 38 and 74. Combining McDonough and Boushy does not violate *In re Gordon*, because McDonough's intended purpose is to provide service to customers and because the limitation "dispatch" or "dispatching" is not recited in either the independent or dependent claims.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

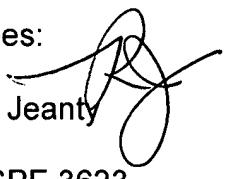
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jonathan G. Sterrett
Examiner
Art Unit 3623


Monday October 23, 2006

Conferees:


Romain Jeanty

Acting SPE 3623

Vincent Millin


Appeals Specialist TC3600